

List of All Chemicals

P Pterocarpus santalinus (Fabaceae)

Common name(s)

Red Saunders

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Plant Part	Low PPM	High PPM	StdDev	*Reference
ACETYL-OLEANOLIC-ACID	Wood	--	--		*
ACETYLOLEANOLALDEHYDE	Wood	--	--		*
BETA-AMYRIN	Plant	--	--		*

Activities (9)

Analgesic
 Antiedemic IC27=40 mg/kg ipr rat
 Antiinflammatory
 Antinociceptive
 Antiulcer
 Gastroprotective
 Hepatoprotective
 Larvicide
 Mosquitocide

BETA-AMYRONE	Plant	--	--		*
BETA-EUDESOL	Wood	--	--		*

Activities (13)

AntiEBV
 Antianoxic ED60=300 orl mus Yamahara, J., Matsuda, H., Naitoh, Y., Fujimura, H., and Tamai, Y. 1990. Antianoxic Action and Active Constituents of Atractylodis Lanceae Rhizoma. Chem. Pharm. Bull. 38(7): 2033-2034, 1990.
 Antimutagenic ID50=0.09 uM/ml
 Antipeptic Chem & Pharm. Bull., 34: 3854, 1986.
 Antisalmonella >0.18 uM/ml
 Antitumor-Promoter?
 Antiulcer
 CNS-Inhibitor
 Calcium-Antagonist 40 uM mus
 Hepatoprotective
 Neurogenic
 Pesticide
 Sedative

BETA-SITOSTEROL	Plant	--	--		*
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Activities (47)

Androgenic
 Angiogenic
 Anorexic Martindale's 28th
 Antiadenomic Merck 11th Edition
 Antiandrogenic Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.
 Antibacterial Recently became Internat. J. Crude Drug Res. 28(1,2,3,4):1990, page 155.
 Anticancer (Breast) Madhavi, D. L., Bomser, J., Smith, M., Singletary, K. 1998. Isolation of Bioactive Constituents from Vaccinium myrtillus (Bilberry) Fruits and Cell Cultures. Plant Sci., 131(1): 95-103.
 Anticancer (Cervix)
 Anticancer (Lung)
 Antiedemic IC54=320 mg/kg orl
 Antiestrogenic Malini, T. and Vanithakumari, G. 1989. Rat Toxicity Studies With B-Sitosterol. Journal of Ethnopharmacology, 28: 221-234, 1990.

CRYPTOMERIDIOL	Wood	--	--	*
DESOXYSANTALIN	Wood	--	--	*
EO	Wood	--	--	*
EPILUPEOL	Bark	--	--	*

Activities (2)

Antiviral
Pesticide

ERYTHRODIOL	Plant	--	--	*
EUDES-4(15)-ENE-2,11-DIOL	Plant	--	--	*
GALLIC-ACID	Wood	--	--	*

Activities (62)

ACE-Inhibitor IC50=7.7
mM/l

Analgesic

AntiHIV

AntiMRSA

Antiadenovirus Economic & Medicinal Plant Research, 5: 194.

Antiallergenic Dorsch, W., Wagner, H. New Antiasthmatic Drugs from Traditional Medicine? Int Arch Allergy Appl Immunol 94: 262-265, 1991.

Antianaphylactic Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antiangiogenic

Antiasthmatic Watt, J.M., and Breyer-Brandwijk, M.G. The Medicinal and Poisonous Plants of Southern and Eastern Africa. 1962.

Antibacterial
MIC=1,000 ug/ml

Antibronchitic Dorsch, W., Wagner, H. New Antiasthmatic Drugs from Traditional Medicine? Int Arch Allergy Appl Immunol 94: 262-265, 1991.

Anticancer

Anticarcinomic
ED50=3

Antiescherichic

Antifibrinolytic Economic & Medicinal Plant Research, 1: 53.

Antiflu Economic & Medicinal Plant Research, 5: 194.

Antihepatotoxic Okuda, T., Yoshida, T., and Hatano, T. Antioxidant Effects of Tannins and Related Polyphenols. Phenolic Compounds in Food and Their Effects on Health, Ch.7 p.93.

Antiherpetic
EC50=>10 ug/ml

Antiinflammatory Kroes, B.H., et al. 1991. Anti-Inflammatory Activity of Gallic Acid. Planta Medica, 58(6): 499.

Antileishmanic
EC50=4.4 ug/ml

Antimutagenic Economic & Medicinal Plant Research, 6: 235.

Antinitrosaminic

Antioxidant IC44=33
ppm

Antioxidant 7 x
quercetin

Antioxidant 2/3 BHA

Antiperiodontitic 10
ug/ml

Antiperoxidant
IC50=69 uM

Antipolio Economic & Medicinal Plant Research, 5: 194.

Antiproteolytic 10
ug/ml

Antiradicular 7 x
quercetin

Antiradicular IC50=4.9
uM

Antiseptic Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Antistaphylococcic
MIC=1,000 ug/ml

Antitumor

Antitumor-Promoter

Antiviral

Apoptotic

Astringent Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.

Bacteristat Lamikanra, A., Ogundaini, A.O., and Ogungbamila*, F.O. Antibacterial Constituents of Alchornea cordifolia Leaves. Phytotherapy Research 4(5): 198.

Bronchodilator Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Cancer-Preventive Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Carcinogenic	
Choleretic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Cyclooxygenase-Inhibitor	
Cytotoxic 500 uM	
Floral-Inhibitor	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Gram(+)icide MIC=1,000 ug/ml	
Gram(-)icide MIC=1,000 ug/ml	
Hemostat	
Hepatoprotective	Neuwinger, H. D. 1996. African Ethnobotany - Poisons and Drugs. Chapman & Hall, New York. 941 pp.
Immunomodulator	
Immunostimulant	McKenna, D. J., Hughes, K., and Jones, K. 2000. Green Tea Monograph. Alternative Therapies, 6(3): 61-82.
Immunosuppressant	
Insulin-Sparing	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Myorelaxant	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
NO-Inhibitor IC-26=250 uM	
Nephrotoxic	Martindale's 29th
Pesticide	
Styptic	
Topoisomerase-I-Inhibitor	Hamada, S. I., Kataoka, T., Woo, J. T., Yamada, A., Yoshida, T., Nishimura, T., Otake, N., Nagai, K. 1997. Immunosuppressive Effects by Gallic Acid and Chebulagic Acid on CTL-Mediated Cytotoxicity. Biol Pharm Bull, 20: 1017-1019.
Xanthine-Oxidase-Inhibitor IC50=24 uM	Hatano, T., Yasuhara, T., Yoshihara, R., Agata, I., Noro, T., and Okuda, T. 1989. Effects of Interaction of Tannins with Co-existing Substances.VII. Inhibitory Effects of Tannins Related Polyphenols on Xanthine Oxidase. Chem. Pharm. Bull. 38(5): 1224-1229

HOMOPTEROCARPIN	Wood	--	2000.0	*
ISOPTEROCARPIN	Wood	--	--	*
ISOPTEROCARPOLONE	Wood	--	--	*
LIQUIRITIGENIN	Plant	--	--	*

Activities (12)

Antidepressant	Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Antiinflammatory	
Antileukemic IC50=0.29 ug/ml	Life Sciences 55: 1061.
Antispasmodic	
Antiulcer	
CNS-Active	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Cancer-Preventive	Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp.
Fungicide ED50=>100	
Hemoglobin-Inducer	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
MAO-Inhibitor EC50=17uM	
Pesticide	
Phytoalexin	

LUP-20(29)-EN-2ALPHA,3BETA-DIOL	Bark	--	--	*
LUPENONE	Bark	--	--	*
LUPEOL	Bark	--	--	*

Activities (21)

AntiEBV	
Antiangiogenic 30-50 ug/ml	
Antiedemic	
Antiflu	
Antihyperglycemic	Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
Antiinflammatory 1/3 indomethacin	
Antilithic 25 mg/kg/day	
Antimalarial IC50=46.8 ug/ml	Khalid, S.A., Farouk, A., Geary** T.G., and Jensen, J.B. 1985. Potential Antimalarial Candidates From African Plants: An In Vitro Approach Using Plasmodium falciparum*. Journal of Ethnopharmacology, 15: 201-209, 1986.
Antioxalate 25	

Antioxidant 25 mg/kg/day	
Antiperoxidant 25 mg/kg/day	
Antiprostaglandin	
Antirheumatic	
Antitumor	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Antiurethrotic	
Antiviral	
Cytotoxic 50-500 ppm	
FPTase-Inhibitor IC50=65 ug/ml	
Hypotensive	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Pesticide	
TOPO-2-Inhibitor IC50=10.4 uM	

PTEROCARPDIOLONE	Wood	--	--	*
PTEROCARPIN	Wood	--	2500.0	*
PTEROCARPOL	Wood	--	--	*
PTEROCARPTRIOL	Wood	--	--	*
PTEROSTILBENE	Wood	--	--	*

Activities (19)

Antibacterial	
Antidiabetic	
Antimelanomic 40 uM	
Antioxidant	
Antiradicular	
COX-1-Inhibitor IC50=20 uM	
COX-2-Inhibitor IC50=84 uM	
Chemopreventive ED50=5 uM	
Cyclooxygenase-Inhibitor IC50=20-84 uM	
Cytotoxic	
Fungicide	Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp.
Hyperglycemic	
Hypocholesterolemic 25 ppm diet hamster	
Hypoglycemic 10-50 mg/kg	
Hypolipidemic	
Hypotensive	
Insecticide	Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
Pesticide	
Phytoalexin	Nigg, H.N. and Seigler, D.S., eds. 1992. <i>Phytochemical Resources for Medicine and Agriculture.</i> Plenum Press, New York. 445 pp.

SANTAL	Wood	--	--	*
SANTALIN	Wood	--	160000.0	*
SANTALIN-A	Wood	--	--	*
SANTALIN-B	Wood	--	--	*
STIGMASTEROL	Plant	--	--	*

Activities (12)

Antihepatotoxic	
Antiinflammatory	Lawrence Review of Natural Products, 1995
Antinociceptive	
Antiphidic 2.3 mg ipr mus	Economic & Medicinal Plant Research, 5: 363.
Antioxidant IC33=10 uM	
Antiviral	Abid Ali Khan, M.M., Jain, D.C., Bhakuni, R.S., Zaim, M., and Thakur, R.S. 1991. Occurrence of some antiviral sterols in <i>Artemisia annua</i> . <i>Plant Science</i> , 75: 161-165, 1991.
Artemicide LC50=110 ppm	Jung, J.H., Pummangura, S., Chaichantipyuth, c., Patarapanich, C., and McLaughlin, J.L. 1989. Bioactive Constituents of <i>Melodorum fruticosum</i> . <i>Phytochemistry</i> . 29(5): 1667-1670. 1990.
Cancer-Preventive	Stitt, P. A. <i>Why George Should Eat Broccoli.</i> Dougherty Co, Milwaukee, WI, 1990, 399 pp.

Hypocholesterolemic Nigg, H.N. and Seigler, D.S., eds. 1992. *Phytochemical Resources for Medicine and Agriculture*. Plenum Press, New York. 445 pp.

Ovulant

Sedative